What is claimed is:

1. A battery container for receiving a battery to provide a desired electric current to an electric device, the battery container comprising:

a main body including a plurality of side portions and a rear portion and thereby defining at least a partial enclosure for accommodating at least one battery therein, the rear portion of the main body having a first and a second electrodes to provide a contact respectively with a first and a second electrodes of the at least one battery, the main body further defining a front opening for receiving and discharging the at least one battery there-through;

a front electrode plate operably attached to the front opening of the main body such that, when the front electrode plate is in a closed position, an electrical connection can be achieved between the at least one battery positioned within the enclosure and the first and second electrodes of the rear portion of the main body via the front electrode plate to provide an electric current to the electric device; and

wherein the main body is configured to selectively accommodate therein either two AA type batteries, one CRV3 battery, or one customized battery adapted for use with the electric device.

- 2. The battery container of claim 1 further including a cover attachable over the front electrode plate for securely closing of the front opening of the main body.
- 3. The battery container of claim 1, wherein the main body further includes a wrong-insertion preventing element for preventing incorrect insertion of the CRV3 battery into the enclosure of the main body.

- 4. The battery container of claim 3, wherein the wrong-insertion preventing element is generally in the shape of a protrusion disposed at one of the side portions.
- 5. The battery container of claim 3, wherein the main body further includes another wrong-insertion preventing element for preventing incorrect insertion of the customized battery into the enclosure of the main body.
- 6. The battery container of claim 5, wherein the additional wrong-insertion preventing element is generally in the shape of a protrusion disposed at one of the side portions.
- 7. The battery container of claim 1, wherein the main body further includes a means for biasing at least one of the AA type battery towards one of the plurality of side portions.
- 8. The battery container of claim 7, wherein the biasing means is generally in the shape of a protrusion disposed at one of the side portions.
- 9. The battery container of claim 1, wherein the main body further includes a holding member for securely holding one end portion of the customized battery.
- 10. The battery container of claim 1, wherein the front electrode plate is attached to the main body by a hinge connection.
- 11. The battery container of claim 1, wherein the front electrode plate includes a first and a second electrode contacts protruded from an inner surface of the front electrode plate.
- 12. The battery container of claim 1 further including a detection member for detecting insertion of the customized battery within the enclosure of the main body.

- 13. The battery container of claim 2 further including means for blocking an electrical connection between at least one of the AA type batteries and the front electrode plate when the AA type batteries are inserted within the enclosure of the main body in a wrong direction.
- 14. The battery container of claim 13, wherein the electrical connection blocking means includes at least one protrusion disposed at an inner surface of the cover.
- 15. The battery container of claim 14, wherein the electrical connection blocking means further includes at least one through hole disposed at the front electrode plate.
- 16. The battery container of claim 1, wherein the battery container is adapted for use with a camera.
- 17. A battery container for receiving a battery for an electric device, the battery container comprising:

a housing defining at least a partial enclosure for accommodating at least one battery therein, the housing including a wall portion with a first and a second electrodes disposed thereon to provide a contact respectively with a first and a second electrodes of the at least one battery, the housing further defining an opening for receiving and discharging the at least one battery there-through;

a covering member including a conductive element disposed at an inner surface thereof and being operably attached to the opening of the housing such that, when the covering member is in a closed position, an electrical connection can be achieved between the at least one battery positioned within the enclosure, the first and second electrodes of the wall portion of the main body, and the conductive element of the covering member to provide an electric current to the electric device; and

wherein the housing is configured to selectively accommodate therein either two AA type batteries, one CRV3 battery, or one customized battery particularly adapted for use with the electric device.

- 18. The battery container of claim 17, wherein the conductive element is an electrode end-plate operably associated with the covering member.
- 19. The battery container of claim 17, wherein the housing further includes at least one wrong-insertion preventing member for preventing incorrect insertion of, at least one of the AA type batteries, the CRV3 battery, and the customized battery into the enclosure of the housing.